

IN THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

- 1-62. (Canceled)
63. **(Currently Amended)** A method of preparing an archive sample for analysis; said method comprising:
- identifying a sample to be analyzed;
  - responsive to said identifying, ascertaining a location of said sample on a discrete sample node supported by a sample carrier; said discrete sample node comprising a sample support medium operative to carry a discrete sample in desiccated form;
  - responsive to said ascertaining, removing said discrete sample node from said sample carrier; and
  - preparing said sample for analysis, wherein  
said sample is biological, and  
wherein said sample is a polynucleotide.
64. (Original) The method of claim 63 wherein said identifying comprises interrogating a data structure.
65. (Original) The method of claim 63 wherein said ascertaining comprises utilizing an optical sensor.
66. (Original) The method of claim 63 wherein said ascertaining comprises reading a bar code.
67. (Original) The method of claim 63 wherein said ascertaining comprises identifying a unique signal transmitted from a transceiver attached to said discrete sample node.
68. (Original) The method of claim 67 wherein said removing comprises transmitting a control signal to said transceiver.

69. (Original) The method of claim 63 wherein said removing comprises utilizing a laser.

70. (Original) The method of claim 63 wherein said removing comprises utilizing a mechanical clipping tool.

71. (Original) The method of claim 63 wherein said preparing comprises depositing said discrete sample node in a sample container.

72. (Original) The method of claim 63 wherein said preparing comprises washing sample material attached to said discrete sample node.

73-75 (Canceled)

76. **(Currently Amended)** The method of ~~claim 75~~ claim 63 wherein said preparing comprises amplifying said polynucleotide.

77. **(Currently Amended)** A method of preparing an archive sample for analysis; said method comprising:

receiving a request related to an experiment;

identifying a sample suitable for said experiment;

responsive to said receiving and said identifying, locating a sample carrier supporting said sample on a discrete sample node; said discrete sample node comprising a sample support medium operative to carry a discrete sample in desiccated form;

detecting a location of said discrete sample node on said sample carrier;

removing said discrete sample node from said sample carrier; and

preparing said sample for ~~analysis~~ analysis, wherein

said detecting comprises obtaining video signals output from an optical sensor.

78. (Original) The method of claim 77 wherein said locating comprises interrogating a database maintaining records related to said sample carrier.

79. (Original) The method of claim 77 wherein said locating comprises utilizing an optical sensor.

80. (Original) The method of claim 77 wherein said locating comprises reading a bar code.
81. (Canceled)
82. **(Currently Amended)** The method of ~~claim 81~~ claim 77 wherein said removing comprises automatically operating a sample node removal device responsive to said obtaining video signals.
83. **(Currently Amended)** The method of ~~claim 81~~ claim 77 wherein said removing comprises manually operating a sample node removal device.
- 84-85 (Cancelled)
86. (Original) The method of claim 77 wherein said removing comprises utilizing a laser.
87. (Original) The method of claim 77 wherein said removing comprises utilizing a mechanical clipping tool.
88. (Original) The method of claim 77 wherein said preparing comprises depositing said discrete sample node in a sample container.
89. (Original) The method of claim 77 wherein said preparing comprises washing sample material attached to said discrete sample node.
90. (Original) The method of claim 77 wherein said sample is non-biological.
91. (Original) The method of claim 77 wherein said sample is biological.
92. **(Currently Amended)** ~~The method of claim 91~~ A method of preparing an archive sample for analysis; said method comprising:  
receiving a request related to an experiment;  
identifying a sample suitable for said experiment;  
responsive to said receiving and said identifying, locating a sample carrier  
supporting said sample on a discrete sample node; said discrete sample node  
comprising a sample support medium operative to carry a discrete sample in  
desiccated form;

detecting a location of said discrete sample node on said sample carrier;

removing said discrete sample node from said sample carrier; and

preparing said sample for analysis,

wherein said sample is biological, and

wherein said sample is a polynucleotide.

93. (Original) The method of claim 92 wherein said preparing comprises amplifying said polynucleotide.

94-101 (Canceled)

102. **(Currently Amended)** A method of preparing an archive sample for analysis; said method comprising:

identifying a sample to be analyzed; said sample maintained in desiccated form and carried on a sample support medium associated with a discrete sample node;

responsive to said identifying, obtaining said sample;

preparing said sample for analysis; and

selectively repeating said identifying, said obtaining, and said preparing at a rate sufficient to prepare in excess of 100 samples for analysis per day wherein said sample is biological, and wherein

said sample is a polynucleotide.

103. (Original) The method of claim 102 wherein said identifying comprises interrogating a database.

104. (Original) The method of claim 102 wherein said identifying comprises utilizing an optical sensor.

105. (Original) The method of claim 102 wherein said obtaining comprises automatically operating a sample node removal device.

106. (Original) The method of claim 105 wherein said obtaining comprises utilizing a laser.

107. (Original) The method of claim 105 wherein said obtaining comprises utilizing a mechanical clipping tool.

108. (Original) The method of claim 102 wherein said preparing comprises depositing said sample in a sample container.

109. (Original) The method of claim 102 wherein said preparing comprises washing said sample.

110-112 (Canceled)

113. **(Currently Amended)** The method of ~~claim 112~~ claim 102 wherein said preparing comprises amplifying said polynucleotide.

114. **(Currently Amended)** The method of ~~claim 111~~ claim 102 wherein said selectively repeating occurs at a rate sufficient to prepare in excess of 200 samples for analysis per day.

115. **(Currently Amended)** The method of ~~claim 111~~ claim 102 wherein said selectively repeating occurs at a rate sufficient to prepare in excess of 500 samples for analysis per day.